

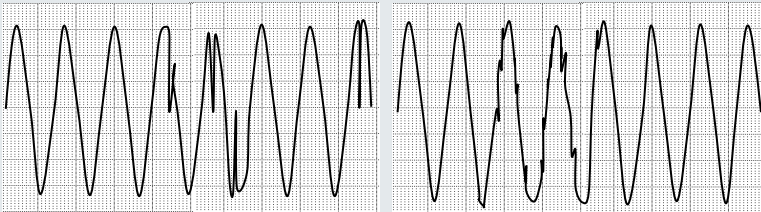
-Detection of power failures-

Power capacitor failure analysis

They help to determine causes of abnormal production equipment stoppages and IT equipment data corruption.

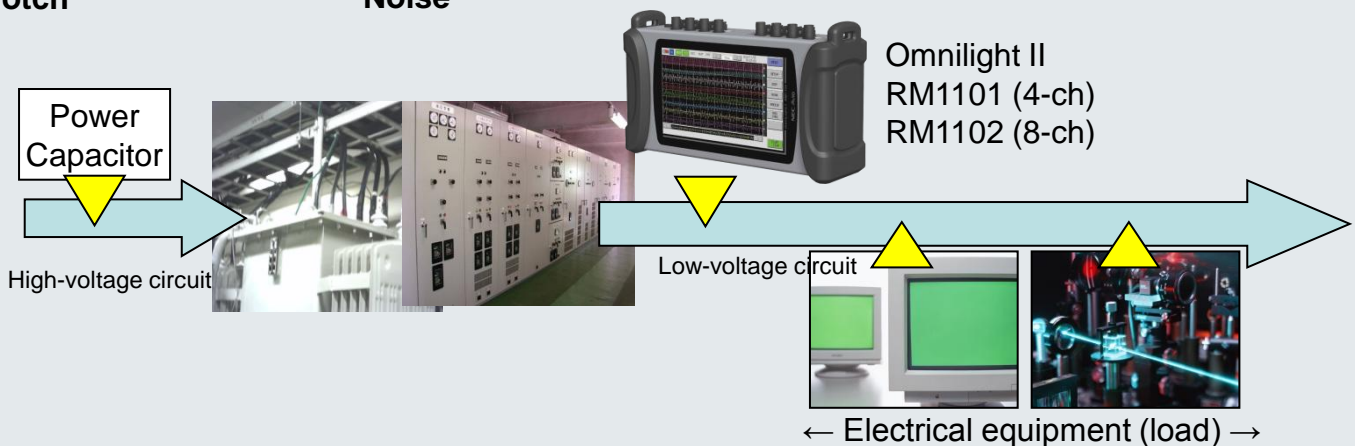
- Power quality deterioration is linked to data loss on home and office computing devices, abnormal outages of production equipment at factories as well as abnormal outage, operation and heating of electronic devices. It is possible to not only monitor power fluctuations in main power systems (flicker testing and instant monitoring) but also read the abnormalities of various power substation facilities from the waveform of a digital oscillographic recorder.
- Transformers, motors and power units suffering from poor power quality leading to overheat and deterioration in performance of electrical instruments and equipment and in worse cases fires may occur. Digital oscilloscope recorders work as measures against these problems.

Abnormality waveform image observed during poor power supply quality



Notch

Noise



i Devices with poor power factor reduce power factor in an entire circuit and generate reactive power. An electric motor with a power factor of 0.8 which generates 100 kW has an apparent power of 125 kVA. Equipment that uses 125 kVA of apparently power to get 100 kW of active power is uneconomical. In order to reduce the 25 kVA of wasted power to near 0, a phase advance capacitor is installed to improve the power factor. The phase advance capacitor gives electric circuits leading power factor and will improve lagging power factor enabling efficient power consumption. When phase advance capacitors are not installed to the low voltage side of power receive equipment or when there is a malfunction switching noise may propagate to the low-voltage circuit side. Our measuring instruments are useful for finding a cause to this problem.

Digital Oscilloscope Recorder

RM1100 series Omnilight

Did you know?

Data recorded with the printer for the RM1100 Omnilight. Additionally, data recorded to SD card can be displayed on the RA2300A Omniace.

